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10/737,355	12/16/2003	Brent R. Jones	D/A3075	6010

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EXAMINER

LIANG, LEONARD S

ART UNIT PAPER NUMBER

2853

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/737,355

Applicant(s)

JONES, BRENT R.

Examiner

Leonard S. Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-27 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-8, 12-19, 22-23, and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Jones et al (US Pat 6530655).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Jones et al discloses:

- {claim 1} A drip plate for use in a phase change ink jet printer using solid ink, comprising: an upper portion; and a lower pointed portion, wherein the lower portion is not coplanar with the upper portion (figure 4, reference 46, 52; note that an anchor tab can constitute an upper portion and is not coplanar to lower portion 52)

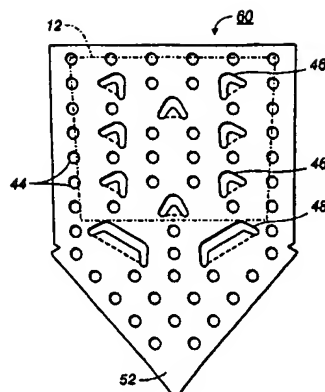


FIG. 4

- {claim 2} wherein a heating element is bonded to a first side of the upper portion (figure 3, reference 29A-D)

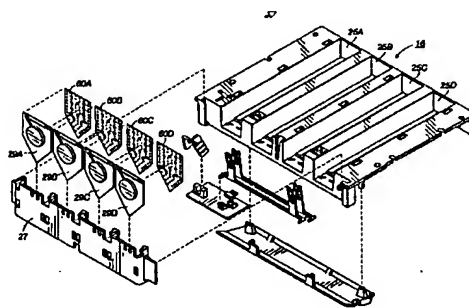


FIG. 3

- {claim 3} wherein the heating element is a closed loop heater (figure 3, reference 29A-D)
- {claim 5} further comprising a bent flange extending upward from the upper side of the drip plate (another one of the anchor tabs can be construed as a bent flange extending upwards)
- {claim 6} wherein the drip plate is made from metal (column 7, lines 16-17)
- {claim 7} wherein the drip plate is made from a nonferrous metal (column 7, lines 16-17)

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- {claim 8} wherein the drip plate is made from aluminum (column 7, lines 16-17)
- {claim 12} at least one anchor tab extending from the second side of the drip plate located near the center of the plate (figure 4, reference 46)
- {claim 13} wherein the anchor tabs are arranged in pairs and wherein each pair is arranged substantially symmetrically about a vertical center line (figure 4, reference 46)
- {claim 14} a silver strainer located near a lower edge of the drip plate (figure 4, reference 48)
- {claim 15} An ink loader (figure 3)
- {claim 16} An ink loader for a phase change ink printer (figure 3), comprising: at least one channel having an entry end and an exit end (figure 3, reference 25A-D); a melt assembly, which includes a drip plate including an upper portion having substantially flat upper first and second sides, and a lower portion having substantially flat lower first and second sides, wherein the lower portion is not coplanar with the upper portion (figure 3, reference 60A-D; figure 4, reference 46, 52); a melt plate fastened to the upper second side of the drip plate; and a heating device thermally connected to one of the melt plate and the drip plate (figure 2, reference 27, 29A-D)
- {claim 17} further comprising an adapter to position the assembly relative to the at least one channel (figure 3, reference 27)
- {claim 18} wherein at least one of the drip plate and the melt plate is made from nonferrous metal (column 7, lines 16-17)

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- {claim 19} wherein at least one of the drip plate and the melt plate is made from aluminum (column 7, lines 16-17)
- {claim 22} wherein the heating element is bonded to the first side of the upper portion of the drip plate (figure 3, reference 29A-D; broad interpretation used of heating element being bonded to drip plate through melt plate)
- {claim 23} wherein the heating element is a closed loop heater (figure 3, reference 29A-D)
- {claim 25} wherein the melt plate has two large cutout portions (figure 2, reference 27; although Jones et al officially calls reference 27 a melt plate adapter assembly, it can be broadly construed as a melt plate in light of the applicant's broad recitation of the claims; note that reference 27 contains numerous holes which can be interpreted as large cutout portions)
- {claim 26} wherein the melt plate includes at least one anchor tab extending from the second side of the drip plate (figure 4, reference 46)
- {claim 27} wherein the melt plate includes a silver strainer located near a lower portion of the drip plate (figure 4, reference 48)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US Pat 6530655) in view of Alavizadeh et al (US Pat 5424767).

Jones et al discloses, with respect to claims 4 and 24, a drip plate and an ink loader for a phase change printer (as applied to claims 1-3, 6-8, 12-19, 23, and 26-27 above).

Jones et al differs from the claimed invention in that it does not disclose that the heating element includes a foil heater encapsulated in a thin electrically insulative film.

Alavizadeh et al discloses, with respect to claims 4 and 24, a heating element, which includes a foil heater encapsulated in a thin electrically insulative film (column 2, lines 19-26).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Alavizadeh et al into the invention of Jones et al. The motivation for the skilled artisan in doing so is to gain the benefit of improved heating of ink.

Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US Pat 6530655) in view of Scheuhing (US Pat 5832835).

Jones et al discloses, with respect to claims 9 and 20, a drip plate and an ink loader for a phase change printer (as applied to claims 1-3, 6-8, 12-19, 23, and 26-27 above).

Jones et al differs from the claimed invention in that it does not disclose:

- {claim 9} wherein the drip plate is made from plastic
- {claim 20} wherein at least one of the drip plate and the melt plate is made from plastic

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Scheuhing discloses, with respect to claims 9 and 20, that using a plastic surface as a material in contact with ink facilitates cleaning of the surface.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Scheuhing into the invention of Jones et al, so that the metal drip plate of Jones et al is replaced with a plastic one. The motivation for the skilled artisan in doing so is to gain the benefit of facilitating the cleaning of the drip plate.

Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US Pat 6530655) in view of Scheuhing (US Pat 5832835), as applied to claims 9 and 20 above and further in view of Gragg et al (US Pat 5467118).

Jones et al teaches all limitations of the claimed invention except for the following:

- {claims 10 and 21} the drip plate is injection molded

Gragg et al discloses, with respect to claims 10 and 21, injection molding is a simple and inexpensive way to treat plastic (column 2, lines 61-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Gragg et al into the invention of Jones et al. The motivation for the skilled artisan in doing so is to gain the benefit of saving money.

#### *Allowable Subject Matter*

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



Claim 11 discloses, "wherein a heating element is molded into the drip plate," which was not found, taught, or disclosed in the prior arts.

***Response to Arguments***

Applicant's arguments filed 08/16/06 have been fully considered but they are not persuasive.

The examiner has not filed a new art rejection. Jones et al is still being used as the primary reference for rejection. However, a slightly different interpretation of Jones et al is now used. As a result, a new non-final rejection is now given. Even so, the new interpretation still provides the basis for a valid rejection, especially in light of the broadness of the applicant's claimed invention.

The examiner has also rejected two claims that were previously objected to as being allowable, that is, claims 5 and 25. The reason for this is because upon further consideration, the examiner realized that too many limitations were read from the specification into the claimed invention. Under MPEP 2111, claims must be given their broadest reasonable interpretation consistent with the supporting description. Furthermore, a claim must be interpreted in light of the specification without reading limitations into the claim. The examiner apologizes for not previously giving claims 5 and 25 their broadest reasonable interpretation without reading limitations from the specification into the claim. As such, this is another reason why a new non-final rejection is herein given.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S. Liang whose telephone number is (571) 272-2148. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/27/06

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**STEPHEN MEIER**  
**SUPERVISORY PATENT EXAMINER**